National Security Education Center
A CONSORTIUM OF LANL INSTITUTES

Los Alamos National Laboratory

Computer System, Cluster, and Networking Summer Institute

Los Alamos
NATIONAL LABORATORY
— EST.1943 —

LA-LP-09-054

HOW TO APPLY

Applications will be accepted
JANUARY 18, 2010 — FEBRUARY 19, 2010

CS/CE/EE Undegraduate Students are Encouraged to Apply.

- Submit a current resume;
- Official University Transcript (with spring courses posted and/or a copy of spring 2010 schedule) 3.0/4.0 GPA minimum;
- One Letter of Recommendation from a Faculty Member; and
- Letter of intent stating strengths, goals, and interests.

Send all application materials to:

Carol Hogsett
Los Alamos National Laboratory
Mail Stop B260
Los Alamos, NM 87545

Email: carol@lanl.gov
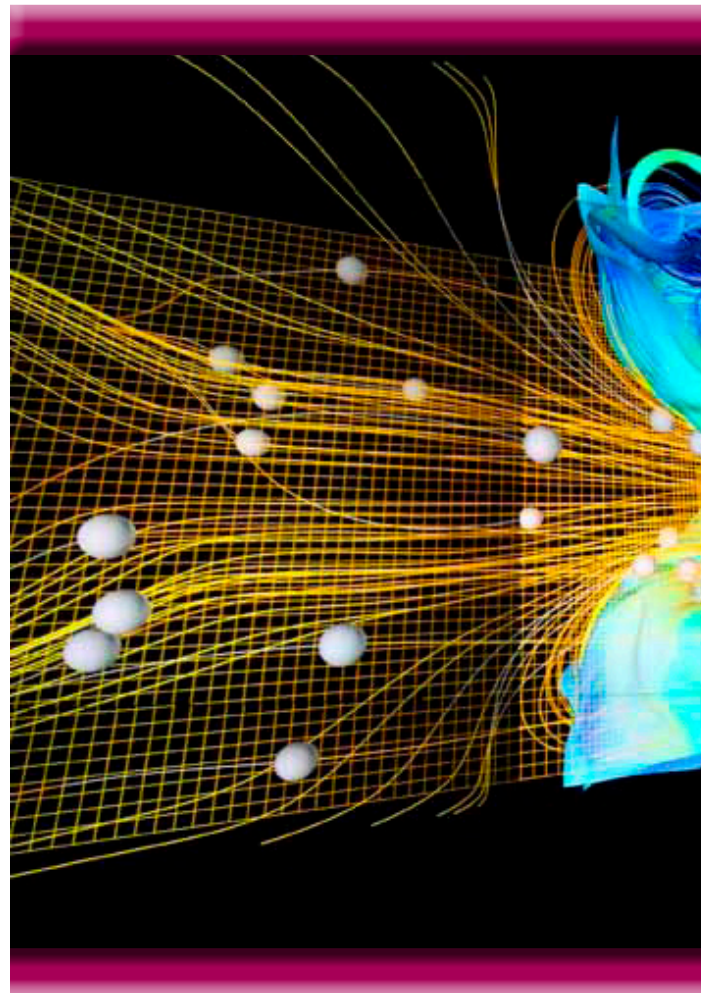Voice: 505-665-4732
Fax: 505-665-4361

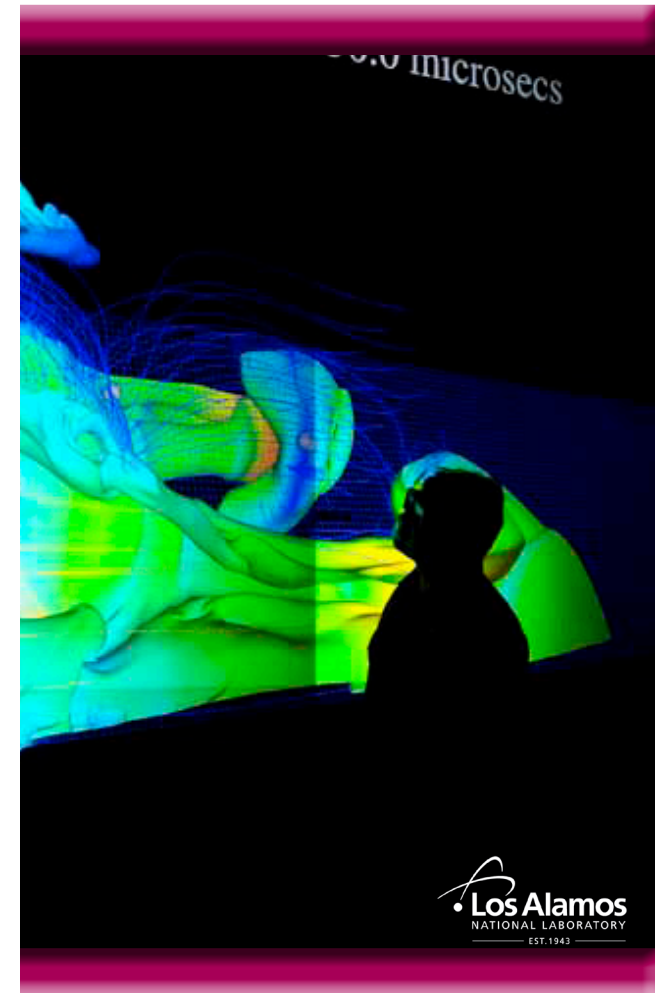Students will be notified of selection by the end of March 2010.

New Mexico Consortium's
IAS
Institute for Advanced Studies
at Los Alamos National Laboratory

ISTI
INFORMATION SCIENCE & TECHNOLOGY INSTITUTE

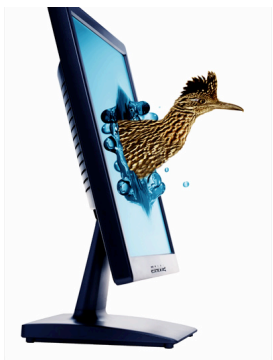Los Alamos
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Computer System, Cluster, and Networking Summer Institute

Purpose

The Computer System, Cluster, and Networking Summer Institute (CSCNSI) is a focused technical enrichment program targeting third-year college undergraduate students currently engaged in a computer science, computer engineering, or similar major. The program emphasizes practical skill development in setting up, configuring, administering, testing, monitoring, and scheduling computer systems, supercomputer clusters, and computer networks through a variety of activities including hands-on technical training, lectures, professional development seminars, and tours of LANL facilities.

Students work in small project teams to execute real-world projects on computer clusters that they assemble and configure. A university instructor provides class instruction, and LANL subject matter experts mentor team projects. Students develop written and oral communications skills through critiqued presentations and present their work at a technical poster session at the conclusion of the Summer Institute. The CSCNSI is also an innovative, proactive approach to making the students aware of career possibilities within the Laboratory.

Description

The Information Science and Technology Institute (ISTI) and the Institute for Advanced Studies (IAS) are soliciting undergraduate student applicants for the Summer Institute 2010.

During the nine-week Institute, students will receive technical training/lectures, professional development seminars, and laboratory experience with LANL staff and an experienced university instructor. A hands-on computer system laboratory/machine room fully populated with unassembled computer nodes, networking equipment, and assorted equipment, cables, and supplies are provided. Additionally, practical skill development in setting up, configuring, administering, testing, monitoring, and scheduling computer systems, supercomputer clusters, and computer networks will be emphasized and facilitated. Technical breadth will be developed via exposure to a variety of key topics, technologies, and problems of interest through participation in tutorials, seminars, guest lecturers by computer professionals and scientists, as well as Lab facility tours. During the Institute, students will work in small project teams and will present their work in a technical forum. A University faculty instructor and LANL mentors will be available as resources throughout the summer.

Students

This highly-selective program is designed for third year (i.e., Junior) undergraduate students, although in some cases, Senior applicants may be considered. Acceptance into the program will be based on academic record (3.0/4.0 GPA minimum), interest and goal statement, and a letter of recommendation.

2009 students testing QDR Infiniband

As a general guideline, students should have sufficient academic achievement to make them eligible graduate school candidates upon completion of their undergraduate program. CS and EE/CE students from UNM, NMSU, and NM Tech are encouraged to apply. Applicants from other schools will also be considered. This program is limited to US citizens.

Los Alamos Research Park

Duration and Location

The summer school program will last nine weeks mid June – mid August and will be held at Los Alamos National Laboratory (LANL) in Los Alamos, NM at the National Security Education Center (NSEC).

Faculty

*Andree Jacobson
UNM*

Faculty from a New Mexico University computer science department will conduct lectures along with several guest lecturers from the Laboratory staff.

"I learned more here than I have in any semester at school." — 2009 Student

"I would definitely recommend this program to someone else. It was a really fun semester and this program provides you with the opportunity to do things you would never get to do anywhere else." — 2008 Student

"This program is a unique and awesome experience. Learning from the incredibly skilled and dedicated people here at LANL is one of the best experiences in my education. Everyone was so kind and inspiring. I would love to work with all people I've met." — 2009 Student